

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: December 27, 2001, 16:48:55 ; Search time 25.08 Seconds
(without alignments)
604.734 Million cell updates/sec

Title: US-09-830-647-1
Perfect score: 3510
Sequence: 1 MNSGAMRHSKHGHSQGV.....SDNLLAFSSPSSTFTGF 674

Scoring table:
BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 212252 seqs, 22503292 residues

Total number of hits satisfying chosen parameters: 212252

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents, AA:*
1: /cgn2_6/ptodata/2/1aa/5A.COMB.pep:*
2: /cgn2_6/ptodata/2/1aa/5B.COMB.pep:*
3: /cgn2_6/ptodata/2/1aa/6A.COMB.pep:*
4: /cgn2_6/ptodata/2/1aa/6B.COMB.pep:*
5: /cgn2_6/ptodata/2/1aa/6C.COMB.pep:*
6: /cgn2_6/ptodata/2/1aa/6D.COMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	158	4.5	783	6	5231168-2 Patent No. 5231168
2	156.5	4.5	3248	1	US-08-353-700-1 Sequence 1, Appl
3	156.5	4.5	3248	5	PCT-US95-16216-1 Sequence 1, Appl
4	155.5	4.4	2482	1	US-08-328-254-6 Sequence 6, Appl
5	146	4.2	2391	2	US-08-446-855A-2 Sequence 2, Appl
6	146	4.2	2391	4	US-09-150-741-2 Sequence 2, Appl
7	144	4.1	688	3	US-09-141-047-8 Sequence 8, Appl
8	140.5	4.0	900	1	US-08-425-061-20 Sequence 20, Appl
9	140.5	4.0	900	2	US-08-825-886-20 Sequence 20, Appl
10	140.5	4.0	914	1	US-08-425-061-21 Sequence 21, Appl
11	140.5	4.0	914	2	US-08-825-886-21 Sequence 21, Appl
12	140.5	4.0	1202	1	US-08-425-061-22 Sequence 22, Appl
13	140.5	4.0	1202	2	US-08-825-886-22 Sequence 22, Appl
14	140.5	4.0	1363	1	US-08-425-061-23 Sequence 23, Appl
15	140.5	4.0	1363	2	US-08-825-886-23 Sequence 23, Appl
16	140.5	4.0	1852	1	US-08-425-061-24 Sequence 24, Appl
17	140.5	4.0	1852	2	US-08-825-886-24 Sequence 24, Appl
18	140.5	4.0	1863	1	US-08-425-061-16 Sequence 16, Appl
19	140.5	4.0	1863	1	US-08-480-784-2 Sequence 2, Appl
20	140.5	4.0	1863	1	US-08-483-553-2 Sequence 2, Appl
21	140.5	4.0	1863	1	US-08-487-002-2 Sequence 2, Appl
22	140.5	4.0	1863	1	US-08-483-554-2 Sequence 2, Appl
23	140.5	4.0	1863	1	US-08-488-011B-2 Sequence 2, Appl
24	140.5	4.0	1863	2	US-08-825-886-16 Sequence 16, Appl
25	140.5	4.0	1863	4	US-08-850-727-2 Sequence 2, Appl
26	140.5	4.0	1863	5	PCT-US95-10202-2 Sequence 2, Appl
27	140.5	4.0	1863	5	PCT-US95-10203-2 Sequence 2, Appl

28	140.5	4.0	1863	5	PCT-US95-10220-2	Sequence 2, Appl
29	140	4.0	1863	1	US-08-598-591-2	Sequence 2, Appl
30	140	4.0	1863	1	US-08-798-691-2	Sequence 2, Appl
31	140	4.0	1863	1	US-08-798-691-4	Sequence 4, Appl
32	140	4.0	1863	1	US-08-798-691-6	Sequence 6, Appl
33	140	4.0	1863	3	US-08-825-487A-2	Sequence 2, Appl
34	140	4.0	1863	3	US-08-825-487A-4	Sequence 4, Appl
35	140	4.0	1863	3	US-08-825-487A-6	Sequence 6, Appl
36	140	4.0	1863	4	US-09-074-476-2	Sequence 2, Appl
37	140	4.0	1863	4	US-09-074-476-4	Sequence 4, Appl
38	140	4.0	1863	4	US-09-074-476-6	Sequence 6, Appl
39	139.5	4.0	1863	2	US-08-568-459A-4	Sequence 4, Appl
40	139.5	4.0	1435	2	US-08-487-826B-4	Sequence 4, Appl
41	138	3.9	1027	4	US-08-446-137B-2	Sequence 2, Appl
42	136.5	3.9	1164	4	US-08-923-992A-2	Sequence 2, Appl
43	136	3.9	1312	2	US-08-592-126-148	Sequence 148, App
44	136	3.9	1312	2	US-08-687-080-51	Sequence 51, Appl
45	134	3.8	2182	2	US-08-487-826B-16	Sequence 16, Appl

ALIGNMENTS

RESULT 1
5231168-2
Patent No. 5231168
; APPLICANT: DZIEGIEL, MORTEN; BORRE, MARTIN; JERSEN, SOREN;
; VUUST, JENS; RIENECK, KLAUS; WIND, ANNETTE; JAKOBSEN, PALLE H.
; TITLE OF INVENTION: MALARIA ANTIGEN
; NUMBER OF SEQUENCES: 19
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/409,658
; FILING DATE: 18-SEP-1989
; SEQ ID NO: 2:
; LENGTH: 783
5231168-2

Query Match 4.5%; Score 158; DB 6; Length 783;
Best Local Similarity 19.1%; Pred. No. 6.4e-05;
Matches 126; Conservative 131; Mismatches 239; Indels 164; Gaps 35;

QY	70	DIAGVEEFLSKDISLYSNKK--EAKFQOTLGRISVPSPESAVYTAETSPHS--HDGS	126
DB	46	DEGG-FEEAHNEPSSSVSELENENFEVSDKSYTE-PAHEEYVSESNPDAENES	103
QY	127	SFKS-----PPTVCLSRGKL-LVERAKIDHDF-----IPNSILSMA	162
DB	104	SIEFAHQEELVPPQNDSESGSLVGN--EEDGFEEPNHEFPDQNDLSNELVESE	161
QY	163	LSMGVKILHIDI-RYIEQKKELVLLKKSSTS-----VRDGGKRVSGAOKTRGRL-	215
DB	162	KSVSEPAEHEVIESEKSVSEPAHEVEISEKSTSEPAHEVESSEOSNNPSEKKGPPV	221
QY	216	KRPVAVEDMSQLRPYQYDQLTNNPPIVNSIQKPCSPFDVDRSSMOKQVLLRIQTGS	275
DB	222	SKPEELKEKVDQPKLVLDQILIEPNFVD--SQPNQPEVVE--PSFKTE-----KVPSE	272
QY	276	DKGGSISLOLQLEK-----KKKGYCECQD-----KYEDLETHL-	311
DB	273	NKH--ASVDEPVEKEKVESEVSEKONSQSEVEEIPVNEDEFEDVHTEQDLDHKYTDPE	330
QY	312	-----SEQHRNFA-----OSNOYVV--DOIYSKLVDEFVEYEKDT	345
DB	331	IYEVEELPSLHNEVAHPRIEVEIEVFPQNNEFQINEDDKSAHIGHEIVEVEIL	390
QY	346	P---KKRITYSVGSLSPVASVLAKTQEKVEYLDHISCKQDQEDDTYKEDQFLKET	402
DB	391	PEDDKKEKVEHEVEVEEILPEDDKNEKGHEIVEVEI-----LPEDD-----KN	435
QY	403	QETEKLLFTSEPIPHPSNENLQINEMSKMSMLSTAEDDIQONFTQ---LPLHNK-	457
DB	436	EKYBHEIVEVEEILPEDDKNE-KGQHEIVEVEEILPEDDKNEKVEHEIVEVEEILPEDDKNEK	494

QY 458 -OECILDISEHTLSENDLEELRYDHAKYCNIOASVHVSDFSTNSGSPKQKSDTV--LFP 514
 DB 495 GQHEIYEV-ELIPEDENE--KVQH-----EIVEEELIPEDEKNGQHEIYEVIELP 545
 QY 515 AFDLKEKDLHSIFPHDSGL-ITINSOEHLIYQAKAPHTPEEPNE-----560
 DB 546 EBDKNEKQHEIYEVIELPEDEKNEKVQHEIYEV--ELIPEDEKNEKVQHEIYEVIEL 602
 QY 561 CDFKMDLSPSGKIHKKVKTILGRNKENLEPNAEFDRTEFTITOEENRICSSPVOSLID 620
 DB 603 PRIVEIEVPS-----OTNNENIETIKPEKKEF--SVEEKALPQBVPVPTLN 650

RESULT 2
 US-08-353-700-1
 ; Sequence 1, Application US/08353700
 ; Patent No. 5599919
 ; GENERAL INFORMATION:
 ; APPLICANT: YEN, TIMOTHY J.
 ; APPLICANT: RATTNER, JEROME B.
 ; TITLE OF INVENTION: NUCLEIC ACID ENCODING A
 ; TITLE OF INVENTION: TRANSIENTLY-EXPRESSED KINETOCHORE PROTEIN,
 ; TITLE OF INVENTION: AND METHODS OF USE
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: DANN, DORFMAN, HERRELL AND SKILLMAN
 ; STREET: 1601 MARKET STREET, SUITE 720
 ; CITY: PHILADELPHIA
 ; STATE: PA
 ; COUNTRY: USA
 ; ZIP: 19103-2307
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: floppy disk
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/353,700
 ; FILING DATE: 09-DEC-1994
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: REED, JANET E.
 ; REGISTRATION NUMBER: 36,252
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (215) 563-4100
 ; TELEFAX: (215) 563-4044
 ; INFORMATION FOR SEQ ID NO: 1:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 3248 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; HYPOTHEICAL: NO
 ; AMTI-SENSE: NO
 ; ORIGINAL SOURCE:
 ; ORGANISM: HUMAN
 ; US-08-353-700-1

Query Match 4.58; Score 156.5; DB 1; Length 3248;
 Best local Similarity 21.0%; Pred. No. 0.0007;
 Matches 143; Conservative 116; Mismatches 250; Indels 173; Gaps 33;
 QY 9 HSKGHPGGIGVKKKRNKPSIKSLKTDNRPKSKCKPLMGVFTLIDPSVTISEKIQKDI 68
 DB 2457 NKGGEV-TLAKAKIEGMOISRGLELDVYTIISSEKENLTLNEL-----QKQERI 2504
 QY 69 KIDGGRVEPSPKIDSYLISNKKKFAQALGRIISPVPSPESAYTA-----E 115
 DB 2505 SEL-----EIIINSRNIIQEKQEK-----YQMKKSSSTAMEMIQTLKELNR 2549

QY 116 TTPSPSHDSSSEK-----SPDTVCLSRGKLIVKA--IKDHQFIPNSITLSNLSMGVKI 169
 DB 2550 VAAIHNQGEACRKKKEGNLSQVECLE-----LEKAQILQGLDEAKNNYIVLQSSVKG-I 2603
 QY 170 LAHDDITVYTEQKKRELYILTKKSTSVADGKPRVSGAOKTRGRKKRPKVDMSQY 229
 DB 2604 QEVEDGKQKIEKDEISLTK--NOIDOBOLYSKLSO-----VEGEHQLW 2647
 QY 230 RPYLQLTNMPF-INTSIQPCSPDVDPKPSMQKQYVRLQTDGKYGSTISIQQLK 288
 DB 2648 KEQMLELNLTVELEDKIVLOS-----KNASLQDLLEV--LQS--SYKLENELELT 2696
 QY 289 EKKKKGYCECCLOKYEDELTHLLSHQHNFAQSNQYVDDIVSKLVDPFVEYERKPRK 348
 DB 2697 KMDKMSFVE-KVKNMTAKETELQRMHEMAOKTAELO-----DELGSK 2739
 QY 349 KR-----IKYVSGLSPVASVLYKKTQEKVELQHSIQKQCEDDTYVKEQNF 397
 DB 2740 NRIAGELOLLEIEIKSSKQDLKELT---LENSEILKSLDCMH--KDOYERKGRVREIA 2793
 QY 398 LYK-ETQETKK-LTFISEPIHPENELKJCNKSNKCSMLSTAEDDIRQNTOLPLK 455
 DB 2794 EYQRLHEAKRKHQALLDTNKQYEVETQYREKLTSEKELSSOKLEIDL-----LKS 2847
 QY 456 NKQECIJDISEHTLSENDLEELRYDVHYKCNIOASVHVSDFSTNSGSPKQKSDTV 511
 DB 2848 SKELNNSLKAATYQILEELKTKMDNLK-----YVQLKRENERAOKMKLLIKSKQ 2900
 QY 512 LFPADLKEKDLHSIFT---HDSGLITINSOEHLIYQAKAPHTPEEPNECDFKMD 567
 DB 2901 LEEKEKILQKLSQLAQAEKQKGTV-MQTKVDELTELEKELKEKTEAD-ETLD 2958
 QY 568 SLPSGKI-HRKVYIILGRNKENLEPNAEFDRTEFTITOEENRICSSPVOSLIDLPQSE 626
 DB 2959 KYCSLLISHKLT-----EKAKEMLEFYVAHLICQ--QSNQD-----S 2993
 QY 627 EKSEFLG-----FTSTYER 640
 DB 2994 RGSPLDLPVVPSPPIPSYTER 3015

RESULT 3
 PCT-US95-16216-1
 ; Sequence 1, Application PC/TUS9516216
 ; GENERAL INFORMATION:
 ; APPLICANT: Yen, Timothy J.
 ; APPLICANT: Rattner, Jerome B.
 ; TITLE OF INVENTION: Nucleic Acid Encoding a Transiently
 ; TITLE OF INVENTION: Expressed Kinetochore Protein, and Methods of use
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: DANN, DORFMAN, HERRELL AND SKILLMAN
 ; STREET: 1601 Market Street Suite 720
 ; CITY: Philadelphia
 ; STATE: PA
 ; COUNTRY: USA
 ; ZIP: 19103-2307
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: floppy disk
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/US95/16216
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/353,700
 ; FILING DATE: 09-DEC-1995
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Reed, Janet E.
 ; REGISTRATION NUMBER: 36,252
 ; TELECOMMUNICATION INFORMATION:

TELEPHONE: (215) 563-4100
 TELEFAX: (215) 563-4044
 INFORMATION FOR SEQ ID NO: 1:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 3248 amino acids
 TYPE: amino acid
 STRANDEDNESS: not relevant
 TOPOLOGY: not relevant
 MOLECULE TYPE: protein
 HYPOTHEICAL: NO
 ANTI-SENSE: NO
 PCT-US95-16216-1

Query Match 4.5%; Score 156.5; DB 5; Length 3248;
 Best Local Similarity 21.0%; Pred. No. 0.0007;
 Matches 143; Conservative 116; Mismatches 250; Indels 173; Gaps 33;

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QY 9 HSKGHFGGIGVKNENKNSPLSKLTNDNRPKSKCKPLMGKVFYLDLPVITSEKLOKDI 68
   ||| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2457 NSKGEVE-TLAKAKITGMQSLGLEDVYITRSEKENLTNEL-----QKEQERI 2504
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 69 KDLGRVEEFLSKDISYLSNKKKFAQLGRISVPSPESAYTA-----E 115
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2505 SEL-----EINSSPENTLOEKEQEK-----YQMKKESSTAMEMLOQLKELNER 2549
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 116 TTSPHPSHDGSSFK---SPDTVCLSRGKLVEKA--IKDHDFTPSNLSLNSMGVKI 169
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2550 VAAIHNDDQACAKAQONISSQVECLE-----LEKAQLLGLEDKANNYIVLQSSVGL-I 2603
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 170 LHIDIRIYIEOKKKEYLKKSSTVBDGGRVSGAGAKTGTGRLKRFVYVEDMSOLY 229
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2604 QVEEDGKQKLEKDEISRLK--NOIDQEOELVSKLSO-----VEGBHOLM 2647
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 230 RPFYLOLTNMPF-INYSIOKPCSPFDVDRPSSMOKOTQYKLRITQDGRKYGGSIOLOLX 288
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2648 KEONLELRLNYELBEKIOYLOS-----KNASLODTLEV---LQS---SYKNLENLELT 2696
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 289 EKKKGVCCECLOKYEDELTHLLSEQRNFPAQSNQYQVVDIVSKLVDFVEYEKDTPK 348
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2697 KMDKMSFVE-KVNMKTAKETELQREHMAQKTAELQ-----EELSGEK 2739
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 349 KR-----IKYVSGSLSPVSAVYLAKTEQKKEVELQHSOKDCQEDDTTYEONF 397
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2740 NMLAGELOLLLEIRISSKQDLKELT--LENSELKSLDCMH--KDOYEKGKVAEEEA 2793
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 398 IYK-ETQETEEK-LFTISPIPHPSNELRGLNEKMSNCSMLSTAEDDIRONFTOLPLK 455
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2794 EYQRLHAEKKNHALLDNTNKOYEVEIOTYREKILTSKEECLSSOKLEIDL-----LKS 2847
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 456 NKQECILDISHTLSENDLEELRVDRKCNIOASVHVSDFSTDSGQSPKQ---KSDTV 511
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2848 SKEELNNSIKATQTLLELKTCKMDNLK-----YVNLQKRENERAQCKMLILKSKQ 2900
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 512 LFPADLKEKDLHSFT---HDSGLITINSQEHLYQAKAPFTTPREPPECDFKND 567
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2901 LEEKEELLOKESLOAOAKQOKGTV--MDTVDELTEIIEKLEKTELEKTEAD- EYLD 2958
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 568 SLPSGKI-HRKVILILGRNRKENLFPNAEFDRKTEFTIOENRISCSPPVOSILDLFOTSE 626
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2959 KYCSILLISHEKL-----EKAKEMLETVQVHLSQ--QSKQD-----S 2993
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 627 EKSEFLG-----FTSYTER 640
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2994 RGSPLLGPVPGSPISPYTER 3015
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|

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RESULT 4
 US-08-328-254-6
 ; Sequence 6, Application US/08328254
 ; Patent No. 5710022
 ; GENERAL INFORMATION:
 ; APPLICANT: Zhu, Xueliang

```

; APPLICANT: Lee, Wen-Hwa
; TITLE OF INVENTION: A No. 5710022zel Nuclear Mitotic Phosphoprotein
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Campbell and Flores
; STREET: 4370 La Jolla Village Drive, Suite 700
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92122
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/328, 254
; FILING DATE: 24-OCT-1994
; CLASSIFICATION: 435
;
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 08/141,239
; FILING DATE: 22-OCT-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Campbell, Cathryn A.
; REGISTRATION NUMBER: 31,815
; REFERENCE/DOCKET NUMBER: P-CJ 1191
;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 535-9001
; TELEFAX: (619) 535-8949
;
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2482 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
; US-08-328-254-6

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Query Match 4.4%; Score 155.5; DB 1; Length 2482;
 Best Local Similarity 21.0%; Pred. No. 0.00057;
 Matches 143; Conservative 116; Mismatches 250; Indels 173; Gaps 33;

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QY 9 HSKGHFGGIGVKNENKNSPLSKLTNDNRPKSKCKPLMGKVFYLDLPVITSEKLOKDI 68
   ||| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 1729 NSKGEVE-TLAKAKITGMQSLGLEDVYITRSEKENLTNEL-----QKEQERI 1776
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 69 KDLGRVEEFLSKDISYLSNKKKFAQLGRISVPSPESAYTA-----E 115
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 1777 SEL-----EINSSPENTLOEKEQEK-----YQMKKESSTAMEMLOQLKELNER 1821
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 116 TTSPHPSHDGSSFK---SPDTVCLSRGKLVEKA--IKDHDFTPSNLSLNSMGVKI 169
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 1822 VAAIHNDDQACAKAQONISSQVECLE-----LEKAQLLGLEDKANNYIVLQSSVGL-I 1875
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 170 LHIDIRIYIEOKKKEYLKKSSTVBDGGRVSGAGAKTGTGRLKRFVYVEDMSOLY 229
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 1876 QVEEDGKQKLEKDEISRLK--NOIDQEOELVSKLSO-----VEGBHOLM 1919
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 230 RPFYLOLTNMPF-INYSIOKPCSPFDVDRPSSMOKOTQYKLRITQDGRKYGGSIOLOLX 288
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 1920 KEONLELRLNYELBEKIOYLOS-----KNASLODTLEV---LQS---SYKNLENLELT 1968
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 289 EKKKGVCCECLOKYEDELTHLLSEQRNFPAQSNQYQVVDIVSKLVDFVEYEKDTPK 348
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 1969 KMDKMSFVE-KVNMKTAKETELQREHMAQKTAELQ-----EELSGEK 2011
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 349 KR-----IKYVSGSLSPVSAVYLAKTEQKKEVELQHSOKDCQEDDTTYEONF 397
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2012 NMLAGELOLLLEIRISSKQDLKELT--LENSELKSLDCMH--KDOYEKGKVAEEEA 2065
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
QY 398 IYK-ETQETEEK-LFTISPIPHPSNELRGLNEKMSNCSMLSTAEDDIRONFTOLPLK 455
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 2066 EYQRLHAEKKNHALLDNTNKOYEVEIOTYREKILTSKEECLSSOKLEIDL-----LKS 2119
   :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|

```

```

OY 456 NKQECIIDEHTEHLELRLVDHYKCNIOASVHVSDFSTNDSGQPKO-----KSDTV 511
DB 2120 SKRELNNSLAKATQILEELKTKRMONK-----YVNOLEKRENEROGKMLITKSCQ 2172
OY 512 LEPADKLEKDLHSIFT---HDSGLITINSSQEHITVQAKAPHPPEPEPCPKMND 567
DB 2173 LEEKEILQKELSQLAOEKOKTGTV-MDTRKVDLETTELKELEKTEKLEAD-EYLD 2230
OY 568 SLPSGKI-HRKVKIILGRNKENLEPNAEFDRFEITVOENRITCSSPVQSLDLLEQYSE 626
DB 2231 KYCSLLISHEKL-----EKAKEMLETOVAHLCSO--OSKOD-----S 2265
OY 627 EKSEPLG-----FTSYTEK 640
DB 2266 RGSPLGFPVGPSPSPSVTEK 2287

RESULT 5
US-08-446-855A-2
Sequence 2, Application US/08446855A
Patent No. 5849573
GENERAL INFORMATION:
APPLICANT: Stewart, Thomas S
APPLICANT: Flores, Maria V
APPLICANT: O'Sullivan, William J
TITLE OF INVENTION: Nucleotide sequence encoding carbamoyl
TITLE OF INVENTION: phosphate synthetase II
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESS: Nixon & Vanderhye PC
STREET: 1100 No. 5849573th Glebe Road, 8th floor
CITY: Arlington
STATE: Virginia
COUNTRY: USA
ZIP: 22201-4714
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/446,855A
FILING DATE: 06-Jul-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Mitchell, Leonard C
REGISTRATION NUMBER: 29,009
REFERENCE/DOCKET NUMBER: 47-80
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-816-4000
TELEFAX: 703-816-4100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 2391 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-446-855A-2

Query Match 42% Score 146; DB 2: Length 2391;
Best Local Similarity 17.68; Pred No. 0.0034;
Matches 129; Conservative 139; Mismatches 264; Indels 202; Gaps 30;
OY 49 KVFYLDLPSTVISE-----KIQKDIKDLGGRVEEPLSKDI STL-----IS 88
DB 1119 QAFHLMMPMDKIHLELIDYWLHKFYNNIYNLQNKIKTL--KLEQLSFNDIKTFKKGHS 1176
OY 89 NKKEA-----KFAQTLG---RISPVSPESAYTAET 117
DB 1177 DKQIAHYLSFTSDNNNNNNNNSSCHVTENDVWKYREKIGLGFPIIKYIDTLSEAFALTN 1236

```

```

OY 118 SPHSHDGSFSPOTVCLSRKLLVEKATKDHFIPSN-----SILSNALSGVKILH 171
DB 1237 YLITITOG-----QEHVLP LNMKRRKICITLNNRNNKRVH 1274
OY 172 IDDIRITYEOKKELYLKKSSTVROGKRVGSAOKTRTGKRPVKYEDMSQLYRP 231
DB 1275 VKNHLINVEYDDVDVQLHRENNNN-----NNMNSGNYENKC-KLNKESGIVNNSNCINT 1328
OY 232 FYIOLINMPFINSIOKPCSPFDVDKPSMOKOTQYKLRIOYDGKYGSTISLOLKEKK 291
DB 1339 NNINIENNICHDISIKRNKIKVTINNSNSISNNENVEFTNLNCVSEKAG--SHHITGKEK 1386
OY 292 KKGVCCECLOKYEDELTHLLSEQRHNFASNOQYQVVDIVSKLVDFEYERKDPKKRI 351
DB 1387 SIG-----SDPTNLSAONSN--NMFSCNNENNNKANVDVNYLNDYRKRREDI 1432
OY 352 KYS-----VGSLSFVSASVLYKTEQ-----KEVELDHISQKDCQEDDTYK 393
DB 1433 NTTVMEQNSYINNNKRENSSLKGDDEDIVANLKENNYSVINNVDCRKKMDGK 1492
OY 394 EONFLVKEQETEKLLFISEPIHPSNELR--GLN-----EKSNKCS-----ML 437
DB 1493 NIN-----DECKTYK-----NKYKDMGLNNIYDELNCTSHSTDHLYLDF 1536
OY 438 STAEDDIRONFTOLPLHKKQECILD-----ISEHTLSNDEEL-----RYD 480
DB 1537 NTSDELGN--KMDMYLSKEKSTSNKPNGSYVVDVYNNKIKNMKELIDENLND 1595
OY 481 HKCNIOASVHVSDFSTNDSGQPKOKSDTYLFPARKLEKDLHSIFTDGLITINSSQ 540
DB 1536 EYNNV--NNGCNINYNASAFYNGKDRNDL---ENDCIRKNDHTYKRYNLNRRRTN 1650
OY 541 EHLTVQAKAPHPPEPEPEPCPKMMSDLPSCGTHRKVKIILGRNKEULEPNA---EFD 597
DB 1651 ERMIMLV-----NNEKESNE-----KGHR--NGLNKKNKEMNKGNKKKDK 1693
OY 598 KRTEFIT-QEENRICSSPVQSLDLLEQTSSEKSEFLGFTSYTEKSGICVNLDIWEENS 656
DB 1694 KNYHYVHKRRNNYNSNNLSKFPNNYVVDINKKEY-----YEDENDIYVTHSSGNDND 1748
OY 657 NLTAFFSPSPST 670
DB 1749 LSNDNYLSSELNT 1762

RESULT 6
US-09-150-741-2
Sequence 2, Application US/09150741
Patent No. 6183966
GENERAL INFORMATION:
APPLICANT: Stewart et al.
TITLE OF INVENTION: Nucleotide Sequence Encoding Carbamoyl Phosphate
PATENT NO. 6183966
TITLE OF INVENTION: Synthetase II
FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/09/150,741
CURRENT FILING DATE: 1998-09-10
EARLIER APPLICATION NUMBER: PL6380
EARLIER FILING DATE: 1992-12-16
EARLIER APPLICATION NUMBER: AU93/00617
EARLIER FILING DATE: 1993-12-02
EARLIER APPLICATION NUMBER: 08/446,855
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH 2391
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: protein
US-09-150-741-2

```

Query Match 4.2%: Score 146; DB 4; Length 2391;

Best Local Similarity 17.6%; Pred. No. 0.0034; Matches 129; Conservative 139; Mismatches 264; Indels 202; Gaps 30;

```

QY 49 KVFYLDPSVYISE-----KLOKIDKLGGRVEEFLSKDISYL-----IS 88
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1119 QAFHNMFMKDIHETHLDYDFLHKFTNYIYLQNKLTLL--KLEQLSNDLKYFKKHGFS 1176
QY 89 NKKEA-----KFAQTIG---RISPVSPESAYTAET 117
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1177 DKQIAHYLSFTSDNNNNNNNISCRVTENDVMKYREKLGLEPHIKVIDTLISAEPAALTN 1236
QY 118 SPFHSHDSSSKSPDYVCLSGKLLVEKAIKDHFIPSN-----SIISNALSGVYKILH 171
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1237 YLYLTLYQG-----QEHVYLPIMMKRKKICTLNNKRNARKKKVH 1274
QY 172 IDDIRYIEQKKELYLKKSSTSVROGKRVSGAOKRTGRGLKKPPVKVEDMSQLR 231
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1275 VKNHLYNEVDKDTOLHKENNN--NNNSGAVENKCK-KLKESYGYNNSSNCINT 1328
QY 232 FYLOLTNMPFINSIOKPCSPDYVDKPSMOKQTQVKLRIGTDGPKYGTSLQQLKEKK 291
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1329 NNIMENNICHDISINKKITVTINNSNSISNNENVEITNLCVSRAC--SHIHYGKEEK 1386
QY 292 KKGICECLOKYEDELTHLISEOHNFASNOYOVDIVSKLVFDFEYEEKDPKPKKRI 351
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1387 SIG-----SDDTITLSAONS--NNSCENNNMKANVDVAVLEDTKREDI 1432
QY 352 KYS-----VGSLSFVSASVLTKEQ-----KEVELQHIQKCOQEDDTYK 393
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1433 NTFVFMGQNSVINKKKNKSSSLIKGEEDIVAVNLKKNNSYVINNVDCKRKMDGK 1492
QY 394 EONFLYKETOETEKRLFISEPIPHPSNELR--GLN--EKMSNKS-----ML 437
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1493 NIN-----DECTYK-----NKYDMGLNNNIYVELSNGTSHSTMDHLYLNF 1536
QY 438 STAEEDITQONTOLPLKKNQOCILD-----ISEHTLSENDLEL-----RVD 480
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1537 NTSOEIENN--KNMDMYLSKERSISKNPNSYVVDVYNNKYKIMKKEILDENLND 1595
QY 481 HYCNIOASVHSDPSTNDSQSPQKSDTVLFPKDLKEDLMSIFTHDSGLITINSQ 540
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1596 EYNNNV--NMKCSYNNAASAVYNGKDRNDL--ENDCIEKNMDHTYKHYNNLNNRSTN 1650
QY 541 EHLTVQAKAPHTPEEPNEDCFKMDSLPSGKIHRKYKILGRRKRENTLEPNA--EFD 597
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1651 ERMMLM-----NNKESNHE-----KGHR--NGLNKKKKEKMEKNKXKNDK 1693
QY 598 KRTEFIT--QENNRICSSPVQSLDLFQTSSEKSEFLGTSTTEKSGICNVLDMEEHSD 656
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1694 KNYHVNKRNRNEVNSNIESKFNMYVDINKKEY-----YEDENDIYYTHSSGNDND 1748
QY 657 NLTAFSSPSTP 670
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1749 LSNNDYLSSELNT 1762

```

RESULT 7
US-09-141-047-8

; Sequence 8, Application us/09141047A

; Patent No. 6043085

; GENERAL INFORMATION:

; APPLICANT: Walker, David H.

; APPLICANT: Yu, Xue-Jie

; TITLE OF INVENTION: Ehrlichia canis 120-kDa Immunodominant Antigenic

; FILE REFERENCE: D6143

; CURRENT APPLICATION NUMBER: US/09/141.047A

; NUMBER OF SEQ ID NOS: 15

; SEQ ID NO 8

; LENGTH: 688
; TYPE: PRT
; ORGANISM: Ehrlichia canis
; FEATURE:
; OTHER INFORMATION: Amino acid sequence of 120 kDa immunoreactive
; OTHER INFORMATION: protein.
US-09-141-047-8

Query Match 4.1%: Score 144; DB 3; Length 688;

Best Local Similarity 20.0%; Pred. No. 0.0008; Matches 133; Conservative 104; Mismatches 260; Indels 168; Gaps 27;

```

QY 53 LDLPSTYISEKIQND-----IKDLGGRVEEFLS-KDISYLSNKKKFAFQTLGRI 102
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 3 IDNNVTTSSSTODKSGNLMETIRILNFGNNSDEVSNEDTVLVEISLQPAVNDVNGPS 62
QY 103 SPVPSPESAYTAETSPHPSHDSSSKSPDYVCLSGKLLVEKAIKDHFIPSN 155
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 63 SEYKKEENAPYKAEADLQPAVDGSEVHSSEY-----GKKVSTSEESTPEYKAEADLQPA 118
QY 156 --NSIISNALSGVYKILHIDIRYIEQKKELY-----LLKSSTSYVDGGRVSGAQ 208
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 119 VQGSIEHSSSEYGEKVSSTSEESTPEYKAEADLQPAVDGSEVHSSEY--GEKVSSTSK 175
QY 209 KTRTGRLKKPPYKAVDMSQILPFYLOLTNMPFINSIOKPCSPDYVDKPSMOKQTQVK 268
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 176 EENT-----PEYKAEADL-----QPAVDGSEVHSSEY----- 202
QY 269 LRIQTDGKYGSTSLQQLKEKKKKKGCCLQKYEDELTHLSEOHNFASNOYOVD 328
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 203 -----GEKVSSTSEESTPEYK-----AEDLQPAVDGSEVHSSEYGEKVSSTSK 247
QY 329 DIVSKLVDFEYKENDTP--KKRIKYSV--GSLSPVSASVLTKEQKEVE----- 376
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 248 -----EENTPEYKAEADLQPAVDGSEVHSSEYGEKVSSTSEESTPEYKAEAD 294
QY 377 -----LOHISQKCOQEDDTYKAEONFLYKETOETEKLL--FISEPIPHPSNELRL 426
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 295 LQPAVDGSEVHSSEYGEKVSSTSEESTPEYKAEADLQPAVDGSEVHSSE--V 346
QY 427 NEKMSNCSMLSTAE--DILRQNTOLPLKKNQOCILDISEHTLSENDLELRYDHYK 483
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 347 GEKVSSTSEESTPEYKAEADLQPAVDGSEVHSSEYGEKVSSEY--TSKEESTPEYKAEADLQ 404
QY 484 CNIOASVHSDPSTNDSQSPQKSDTVLFPKDLKEDLMSIFTHDSGLITINSQ 543
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 405 PAVDGSVEHSSSEYGEKVSSTSEESTPEYKAEADLQPAVDGSEVHS--AVDGSVEHS 450
QY 544 TVQAKAPHTPEEPNEDCFKMDSLP-----SGKIHRKYKILGRRKRENTLEPNA--EFD 589
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 451 SSEVEKVSSTSEESTPEYKAEADLQPAVDGSEVHSSEYGEKVSSTSEESTPEYKAEAD 510
QY 590 LEP-----NAEPDKRTEFITQEN--RICSSPVQSLDLFQTSSEKSEFLGTST 636
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 511 LQPAVDGSEVHSSEYGEKVSSTSEESTPEYKAEADLQPAVDGSEVHSSEYGEKVSST 570
QY 637 YTEKS 641
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 571 KEEST 575

```

RESULT 8

US-08-425-061-20

; Sequence 20, Application us/08425061

; Patent No. 5622829

; GENERAL INFORMATION:

; APPLICANT: KING, Mary-Clair

; APPLICANT: FRIEDMAN, Lori

; APPLICANT: OSTERMEYER, Beth

; APPLICANT: ROWELL, Sarah

; APPLICANT: LYNCH, Eric

; APPLICANT: SZABO, Csilla

APPLICANT: LEE, Ming
TITLE OF INVENTION: GENETIC MARKERS FOR BREAST AND OVARIAN
TITLE OF INVENTION: CANCER
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: FLEHR, HOBBACH, TEST, ALBRITTON & HERBERT
STREET: 4 Embarcadero Center, Suite 3400
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/425,061
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: OSMAN, Richard A
REGISTRATION NUMBER: 36,627
REFERENCE/DOCKET NUMBER: A-59563-3/DJB/RAO
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8700
TELEFAX: (415) 494-8771
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 900 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-425-061-20

Query Match 4.0%; Score 140.5; DB 1; Length 900;
Best Local Similarity 20.2%; Pred. No. 0.0024;
Matches 139; Conservative 106; Mismatches 239; Indels 205; Gaps 36;

16 GGIOYKNEKNRPSLR--SLKTDNRPEKSKPLWGKVFY-----LDLPSVTISEK 63
323 GKKEICNDNRRTPTTEKKVVDLADPLCEKKE---WNKCKLPCSENPRTEDYFWITLNS 378
64 LQKDIKDLGVEEFELSKDISYLSNKKKAKPAQTLGRISFPSPESAVTAETSPSPSH 123
379 IOK-VNEWFSRSHDELGLSDSDSHGESESNKAVADVLDVLEV-----DEY 422
124 DSSFSKSPDYCLSKGLVEKAIKDHDFIPNSILSNALSMGVKILHIDDIRYTEOK- 182
423 SSSSKKI-DLADSPRHALICKSEYVH---SKSVESN-----LEDKI 460
183 KKELYLKKSSTSVROGKRVSGA-----OKTGTGKPKFYKVEDMSOLRRPY 233
461 FKRYTRKKAASIPNLSHTEMLIGAVTEPOLIORPLTNKLR---KRPTSGLHPEPF 517
234 IOLTMFPINISIKKSPSPDYKPSMKQIOVAKRIQTDG--DKGGISIDOLJKEK 291
518 IKKADL---AVK--TPMIMGNOTEQGOVMTTNSGHEKTKGSDIO---NEKN 567
292 KKGVCCECLOKEDLETHLLSEQRNEAQSNOYQVDDIVSKLVEFVEYKDPKKRI 351
568 P-----NPISELE-----KSAFKTAEPISISSISNMELNINSKAPKKNRL 611
352 KYSVG-----SLSPYSASVL-----KTEQKEKVELQHSQKDC 385
612 RKKSSTRIHALIELVSRNLSPPNCTELQIDSCSSSEIRIKKRYNQMPVHSHNLDMG 671
386 QEDDTVEQONFLYKKEQTEKKLFISEPIHPNSN---ELRGINEMKS-NKCSMLSTAE 441
672 KEPATGAKSN---KPEGTSKR-----HSDSTPELKLTNAGSFTCSKNTSEIK 719

442 DDIRNPTOLPLKRNQECILDISHTLSENDLELRVDHYKCNIOASVHVSFSTNSG 501
720 EFVNPDS---LP-----REE-----KEEKLETVRV-----SNNA 744
502 SQPQ---KSDTVLPFAKDLKEDLSIFTHDSGLITINSQEHLYQAKAPFHPPEP 558
745 EDPKDLMSERVLQTERSEVSSISLVPQTDG-----TQESISLLESTLGRKATPE 798
559 NEC-----DFKNMDSLPSGKIRKVKITILGRNKENL-----EPNAEDKRTETIOEE 607
799 NKCVSGCAFEN---PKGLHGCSKO--NRNDTEGFKYPLGHEVN---HSRETSIEMEE 849
608 NRICSSPQSLDLPQTSREKSEFLGPTS 636
850 SEI---DAQYLQNTFVKSKROS-FAPFSN 874

US-08-825-886-20
Sequence 20, Application US/08825886
Patent No. 5821328
GENERAL INFORMATION:
APPLICANT: KING, Mary-Claire
APPLICANT: FRIEDMAN, Lori
APPLICANT: OSTERMEYER, Beth
APPLICANT: ROWELL, Sarah
APPLICANT: LYNCH, Eric
APPLICANT: SZABO, Csilla
APPLICANT: LEE, Ming
TITLE OF INVENTION: GENETIC MARKERS FOR BREAST AND OVARIAN
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: FLEHR, HOBBACH, TEST, ALBRITTON & HERBERT
STREET: 4 Embarcadero Center, Suite 3400
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,886
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/425,061
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: OSMAN, Richard A
REGISTRATION NUMBER: 36,627
REFERENCE/DOCKET NUMBER: A-59563-3/DJB/RAO
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8700
TELEFAX: (415) 494-8771
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 900 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-825-886-20

Query Match 4.0%; Score 140.5; DB 2; Length 900;
Best Local Similarity 20.2%; Pred. No. 0.0024;
Matches 139; Conservative 106; Mismatches 239; Indels 205; Gaps 36;

```

OY 16 GGIOVKNKRNPSLK-----SLKTDNRPKSKCKPLMGKVFY-----LDLPSTVISEK 63
DB 323 GSKETCNDRTPTSTKRYKVDLADPLCERKE---WNKOKLPSCSNPRDTEVPWTILNMS 378
OY 64 LQDKIKDLGVEEFLSKDISYLSNKKKEAKFAOTLGRISVPSPESAVTAETSPHSH 123
DB 379 IQK-VNEMFSSRDELSDSHDSESNMAKVADVLVLENY-----DEY 422
OY 124 DGSFSPDVCVLSRGKLLVEKAIKDHDFIPSNLSNALSNGVKLIHIDIRYIEOK- 182
DB 423 SGSSSEKI-DLLASDPHALICKSERVH---SKSVESN-----IEDKI 460
OY 183 KKEIYLLKSSSTVRDGGKRVGSGA-----OKTRTGRLKPFVKVEDMSQLYRPFY 233
DB 461 FGKTYRKRAKSLPNLSHYTENLITGAFTVTEPOLIOERPLTNKLR---KRRPTSGILHPEDF 517
OY 234 LQLTNMPFINYSIOKPCSPFDVDRPSSMOKOTQVKLRLOTG--DKYGGTSIOLQLEKK 291
DB 518 IKKADL-----AVOK--TPREINOGTNOEONGVAMNTNSGHEKTKGDSIQ---NEKN 567
OY 292 KKGVCCECLQKYEDLETHLSSEQHNFQAQNOYVDDIVSKLVDFEVEYERDTPKKRI 351
DB 568 P-----NPISLB-----KESAFKTKAEPISISSINMELELINHNSKAPKKNRL 611
OY 352 KYSVG-----SLSPVASVYL-----KTEDEKKEVLELOHSQKDC 385
DB 612 RRSKSTRHIALELVYSRNLSPNCTELOIDSCSSSEIKKKYKNQMPVRRSRNLQLEMG 671
OY 386 QEDDTVKEQNFLYKETOTETKLLFISEPIPHPSN---ELRGLNEKMS-NKCSMLSTAE 441
DB 672 KEPATGAKKSN---KPNQOTSKR-----HSDTFPELKTNAPOSTFRKCSNTSLK 719
OY 442 DDIRQNFQOLPLHKNKQECILDISHTLSENDLELRVDHYKCNIOASVHVSDFSTNSG 501
DB 720 EFVWPS--LP---REE-----KEEKLETVKY-----SNNA 744
OY 502 SQPKQ---KSDTVLPAPKADLKEKDLHSIFTHDSGLITINSOEHLTVQAKAPFHPPREP 558
DB 745 EDPKDLMSGERVLOTESVSSISLVPCTDYG---TOESISLLEVSTLGRAKTEP 798
OY 559 NEC-----DFKNMDSLPSGKIRKVKIILGRNKKENTL-----EPNAEFDRKTEFTIOEE 607
DB 799 NKCVSQAFAFN-----PKGLIHGCSKD--NRNDTEGFKYPLGHEVN---HSRETSIEMEE 849
OY 608 NRICSSPVQSLDLRQISEKSEFLGPTS 636
DB 850 SEL---DAQYLONTFKVSKRQS-FAPFSN 874

```

```

RESULT 10
US-08-425-061-21
; Sequence 21, Application US/08425061
; Patent No. 5622829
; GENERAL INFORMATION:
; APPLICANT: KING, Mary-Claire
; APPLICANT: FRIEDMAN, Lori
; APPLICANT: OSTERMEYER, Beth
; APPLICANT: ROWELL, Sarah
; APPLICANT: LYNCH, Eric
; APPLICANT: SZABO, Csilla
; APPLICANT: LEE, Ming
; TITLE OF INVENTION: GENETIC MARKERS FOR BREAST AND OVARIAN
; TITLE OF INVENTION: CANCER
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FLEHR, HOBBACH, TEST, ALBRITTON & HERBERT
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-4187
; COMPUTER READABLE FORM:

```

```

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/425,061
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OSMAN, Richard A
; REGISTRATION NUMBER: 36,627
; REFERENCE/DOCKET NUMBER: A-59563-3/DJB/RNO
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 494-8700
; TELEFAX: (415) 494-8771
; TELETYPE: 910 277299
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 914 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-425-061-21

Query Match 4.0%, Score 140.5; DB 1; Length 914;
Best Local Similarity 20.2%; Pred. No. 0.0024;
Matches 139; Conservative 106; Mismatches 239; Indels 205; Gaps 36;

OY 16 GGIOVKNKRNPSLK-----SLKTDNRPKSKCKPLMGKVFY-----LDLPSTVISEK 63
DB 323 GSKETCNDRTPTSTKRYKVDLADPLCERKE---WNKOKLPSCSNPRDTEVPWTILNMS 378
OY 64 LQDKIKDLGVEEFLSKDISYLSNKKKEAKFAOTLGRISVPSPESAVTAETSPHSH 123
DB 379 IQK-VNEMFSSRDELSDSHDSESNMAKVADVLVLENY-----DEY 422
OY 124 DGSFSPDVCVLSRGKLLVEKAIKDHDFIPSNLSNALSNGVKLIHIDIRYIEOK- 182
DB 423 SGSSSEKI-DLLASDPHALICKSERVH---SKSVESN-----IEDKI 460
OY 183 KKEIYLLKSSSTVRDGGKRVGSGA-----OKTRTGRLKPFVKVEDMSQLYRPFY 233
DB 461 FGKTYRKRAKSLPNLSHYTENLITGAFTVTEPOLIOERPLTNKLR---KRRPTSGILHPEDF 517
OY 234 LQLTNMPFINYSIOKPCSPFDVDRPSSMOKOTQVKLRLOTG--DKYGGTSIOLQLEKK 291
DB 518 IKKADL-----AVOK--TPREINOGTNOEONGVAMNTNSGHEKTKGDSIQ---NEKN 567
OY 292 KKGVCCECLQKYEDLETHLSSEQHNFQAQNOYVDDIVSKLVDFEVEYERDTPKKRI 351
DB 568 P-----NPISLB-----KESAFKTKAEPISISSINMELELINHNSKAPKKNRL 611
OY 352 KYSVG-----SLSPVASVYL-----KTEDEKKEVLELOHSQKDC 385
DB 612 RRSKSTRHIALELVYSRNLSPNCTELOIDSCSSSEIKKKYKNQMPVRRSRNLQLEMG 671
OY 386 QEDDTVKEQNFLYKETOTETKLLFISEPIPHPSN---ELRGLNEKMS-NKCSMLSTAE 441
DB 672 KEPATGAKKSN---KPNQOTSKR-----HSDTFPELKTNAPOSTFRKCSNTSLK 719
OY 442 DDIRQNFQOLPLHKNKQECILDISHTLSENDLELRVDHYKCNIOASVHVSDFSTNSG 501
DB 720 EFVWPS--LP---REE-----KEEKLETVKY-----SNNA 744
OY 502 SQPKQ---KSDTVLPAPKADLKEKDLHSIFTHDSGLITINSOEHLTVQAKAPFHPPREP 558
DB 745 EDPKDLMSGERVLOTESVSSISLVPCTDYG---TOESISLLEVSTLGRAKTEP 798
OY 559 NEC-----DFKNMDSLPSGKIRKVKIILGRNKKENTL-----EPNAEFDRKTEFTIOEE 607
DB 799 NKCVSQAFAFN-----PKGLIHGCSKD--NRNDTEGFKYPLGHEVN---HSRETSIEMEE 849

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OY 608 NRICSSPVOSLIDFOTSEKSEFLGFTS 636
DB 850 SEL---DAOYLONTFKVSKROS-FAPFSN 874

RESULT 11
US-08-825-886-21
Sequence 21 Application US/08825886

Patient No 5821328
GENERAL INFORMATION:
APPLICANT: KING, Mary-Claire
APPLICANT: FRIEDMAN, Lori
APPLICANT: OSTERMEYER, Beth
APPLICANT: ROWELL, Sarah
APPLICANT: LYNCH, Eric
APPLICANT: SZABO, Csilla
APPLICANT: LEE, Ming
TITLE OF INVENTION: GENETIC MARKERS FOR BREAST AND OVARIAN
TITLE OF INVENTION: CANCER
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESS: FLEHR, HOBACH, TEST, ALBRITTON & HERBERT
STREET: 4 Embarcadero Center, Suite 3400
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,886
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/425,061
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: OSMAN, Richard A
REGISTRATION NUMBER: 36,627
REFERENCE/DOCKET NUMBER: A-59563-3/DJB/RAO
TELEPHONE: (415) 494-8700
TELEFAX: (415) 494-8771
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 914 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-825-886-21

Query Match 4.08; Score 140.5; DB 2; Length 914;
Best Local Similarity 20.28; P-adj. 0.0024;
Matches 139; Conservative 106; Mismatches 239; Indels 205; Gaps 36;
OY 16 GGIQVNEKNRPSLK---SLKTDNRPEKSKCKPLGCKVY-----IDLPSYITSEK 63
DB 323 GSEETCNDNRRTSTSTKRYVLAADPLCERKE---WMKQKLPCESENPRTEDEVWITLNS 378
OY 64 LQNDKIDLCGRVEFLSDIYILSNKKEKFAQTLGRISPPSPESAYTAEITSPRPH 123
DB 379 IQK-VNEMFSRDELLGSDSDHDESESNKAVADVDVINEV-----DEY 422
OY 124 DGSFSPPTVCLSGKLLVEKAIKDHDFPSNLSNLSMGVAILHIDIRIYIYOK- 182
DB 423 SSSSEKI-DLLASDPHEALICKSERVH-----SKSVSN-----IEDKI 460

OY 183 KRELVLKRSSTSVNBDGKRVGSGA-----OKTRTGLRKPFFKVEDMSOLYRPY 233
DB 461 FGTYRRKASLNLNHTVENLILGAFVTEPOLIOERPLNKLKR---KRRTGGLHDEPF 517
OY 234 LQLTNMPFTNYSIQPCSPFDVDPKSSMOKOTGVKLIOTDG--DKYGGTSIQLOLKEK 291
DB 518 IKRADL-----AVOK--TPMINOGTNOTGONVNNIISGHEKTKGDSIQ---NEKN 567
OY 292 KRGVCECLOKYEDELTEHLSEQRNPAQSNQYOVVDIVSKLVEFVEYKEDTPKKRI 351
DB 568 P-----NPTESE-----KESAFYTKAEPISISSISNMELELNHNSKAPKNRL 611
OY 352 KYSVG-----SLSPVASVL-----KTRQKEKVELOHISOKDC 385
DB 612 RRRSSTRHIALELVSNRSLSPNCTELOJSDSCSSEELKRRKNQMFVRHNRNLOMEG 671
OY 386 QEDDTVKBONFLYKETOETEKLLFTSEPIPHPSN---ELGLNEKMS-NKCSMLSTAE 441
DB 672 KEPATGAKKSN---KNEOTSKR-----HDSQPEPLKLTNAPOSTFKSNTSEK 719
OY 442 DDIONFTQPLPHKKKQECILDISHTLSNDLELRVDHVKCNIAQSVHVSDETDNG 501
DB 720 EFVNPSP--LP---RE-----KEEKLEYV-----SNN 744
OY 502 SQPKQ--KSDVLEPAPDLKEDLHSLFTHDSGLTITNSOEHLTVQAKAPHTPEEP 558
DB 745 EDPDMLSGERYLOTESVSSISLPGTDG-----TQESISLEVTSLQKAKTEP 798
OY 559 NEC---DKRNDSTLPSGKTHRKVLIILGRNKENL-----EPNAEFDRTEFTIOE 607
DB 799 NKCVSQAEPN---PGLHIGCSKD--NRNDEGKPKPLGHEVNA---HSRSTIMEE 849
OY 608 NRICSSPVOSLIDFOTSEKSEFLGFTS 636
DB 850 SEL---DAOYLONTFKVSKROS-FAPFSN 874

RESULT 12
US-08-425-061-22
Sequence 22 Application US/08425061
Patient No. 5622829
GENERAL INFORMATION:
APPLICANT: KING, Mary-Claire
APPLICANT: FRIEDMAN, Lori
APPLICANT: OSTERMEYER, Beth
APPLICANT: ROWELL, Sarah
APPLICANT: LYNCH, Eric
APPLICANT: SZABO, Csilla
APPLICANT: LEE, Ming
TITLE OF INVENTION: GENETIC MARKERS FOR BREAST AND OVARIAN
TITLE OF INVENTION: CANCER
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESS: FLEHR, HOBACH, TEST, ALBRITTON & HERBERT
STREET: 4 Embarcadero Center, Suite 3400
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/425,061
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: OSMAN, Richard A
REGISTRATION NUMBER: 36,627
REFERENCE/DOCKET NUMBER: A-59563-3/DJB/RAO

TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 494-8700
 TELEFAX: (415) 494-8771
 TELE: 910 277299
 INFORMATION FOR SEQ ID NO: 22:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1202 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-425-061-22

Query Match 4.0%; Score 140.5; DB 1; Length 1202;
 Best local Similarity 20.2%; Pred. No. 0.0036;
 Matches 139; Conservative 106; Mismatches 239; Indels 205; Gaps 36;

OY 16 GGIQVKNRKNRPSLK---SLKTDNRPEKSKCKPLMGKVFY-----LDLPSTYISEK 63
 DB 323 GSKETCNDRBRTPTKKYVDLADPLCERKE---WNKQKLPCESENPRDTEVPWITLNS 378
 OY 64 LQKDIDLGRVVEFLSDIYLSNKKKFAQTLGRISPVSPESAYTAETTSPPSH 123
 DB 379 IQK-VNEMFSRSDLLGSDSDHGESESNAKVADVLVNEV-----DEY 422
 OY 124 DGSFSPDTCVLSRGKLLVEKAIKDHPFIPNSILSNALSMGVKILHIDIRYIEOK- 182
 DB 423 SSSSEKI-DILASDPHEALICKSERVH---SKVSESN-----IEDKI 460
 OY 183 KKEILLKKSSTSVBDGKRVGSGA-----OKTRTGRLLKPPVKVEDMSOLYRPY 233
 DB 461 FGKTYRKKAASLPNLSHVTEMLIGAFVTEPQIIQERPLTNLKR---KRPPTSGLHPEDF 517
 OY 234 LQLTNMPFTINSIQPCSPEDVDKPPSMQKQTVKLRITQDG--DKYGGTSIQDLQKEK 291
 DB 518 IKKADL-----AVOK--TPEMINGTNGTEONGVNMNTNSGHEMKTGDSIO--NEKN 567
 OY 292 KKGVECCLOKVEDLEFHLISQHRNFAQSNQYVDDIVSKLVDFVEYEDTPKKRI 351
 DB 568 P-----NPISLE-----KESAFKTKAEPISSTISNMELELNTNSKAPKKRL 611
 OY 352 KYSVG-----SLSPVSAVL-----KTKDOKEVELOHISQKXC 385
 DB 612 RKKSSTRIHAEILVYSRNLSPNCTELOIDSCSSSEETKKKKYNNMPVRRHSRNLMEG 671
 OY 386 QEDDTVKEONFLYKETEETKLLFISEPIPHPSN---ELRGLNEKMS-NKCSMLSTAE 441
 DB 672 KEPATGAKKSN---KPNQTSKR-----HSDTPEPELKITNAPSGFTKCSNTSELK 719
 OY 442 DDIRQNTQQLPLHKKKQECILDISHTLSENDLELRVDHYCNITQASVHVSDFSTDSG 501
 DB 720 EKVNSP---LP---REF-----KEERLETVKV-----SNNV 744
 OY 502 SOPKQ---KSDVLPFPADLKEKDLASITFHDSGLTINSQEHLYQAKAPFHTPREP 558
 DB 745 EDPKMLMSEGVETDTERKVSSTISLVPSTDYG-----TQESLLELVSTLGRAKRT 798
 OY 559 NEC-----DFKNMDSLPSGKIRKVKYIILGRNRKEML-----EPAAEPDKRTEFTOE 607
 DB 799 NKCYSQACAFEN-----PKGLIHGCKSD--NRNDTEGFKYPLGHEVN---HSKRTSIEME 849
 OY 608 NRICSSPVQSLDLFQTESEKSEFLGTS 636
 DB 850 SEL---DAOYLQNTPEKVSQRS-FAPESN 874

RESULT 13
 US-08-825-886-22
 ; Sequence 22, Application US/08825886
 ; Patent No. 5821328
 ; GENERAL INFORMATION:
 ; APPLICANT: KING, Mary-Claire

APPLICANT: FRIEDMAN, Lori
 APPLICANT: OSTERMEYER, Beth
 APPLICANT: ROWELL, Sarah
 APPLICANT: LYNCH, Eric
 APPLICANT: SZABO, Csilla
 APPLICANT: LEE, Ming
 TITLE OF INVENTION: GENETIC MARKERS FOR BREAST AND OVARIAN
 NUMBER OF SEQUENCES: 24
 CORRESPONDENCE ADDRESS:
 ADDRESS: FLEHR, HOBBACH, TEST, ALBRITTON & HERBERT
 STREET: 4 Embarcadero Center, Suite 3400
 CITY: San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94111-4187
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/825,886
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/425,061
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: OSMAN, Richard A
 REGISTRATION NUMBER: 36,627
 REFERENCE/DOCKET NUMBER: A-59563-3/DUB/RAO
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 494-8700
 TELEFAX: (415) 494-8771
 TELE: 910 277299
 INFORMATION FOR SEQ ID NO: 22:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1202 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-825-886-22

Query Match 4.0%; Score 140.5; DB 2; Length 1202;
 Best local Similarity 20.2%; Pred. No. 0.0036;
 Matches 139; Conservative 106; Mismatches 239; Indels 205; Gaps 36;

OY 16 GGIQVKNRKNRPSLK---SLKTDNRPEKSKCKPLMGKVFY-----LDLPSTYISEK 63
 DB 323 GSKETCNDRBRTPTKKYVDLADPLCERKE---WNKQKLPCESENPRDTEVPWITLNS 378
 OY 64 LQKDIDLGRVVEFLSDIYLSNKKKFAQTLGRISPVSPESAYTAETTSPPSH 123
 DB 379 IQK-VNEMFSRSDLLGSDSDHGESESNAKVADVLVNEV-----DEY 422
 OY 124 DGSFSPDTCVLSRGKLLVEKAIKDHPFIPNSILSNALSMGVKILHIDIRYIEOK- 182
 DB 423 SSSSEKI-DILASDPHEALICKSERVH---SKVSESN-----IEDKI 460
 OY 183 KKEILLKKSSTSVBDGKRVGSGA-----OKTRTGRLLKPPVKVEDMSOLYRPY 233
 DB 461 FGKTYRKKAASLPNLSHVTEMLIGAFVTEPQIIQERPLTNLKR---KRPPTSGLHPEDF 517
 OY 234 LQLTNMPFTINSIQPCSPEDVDKPPSMQKQTVKLRITQDG--DKYGGTSIQDLQKEK 291
 DB 518 IKKADL-----AVOK--TPEMINGTNGTEONGVNMNTNSGHEMKTGDSIO--NEKN 567
 OY 292 KKGVECCLOKVEDLEFHLISQHRNFAQSNQYVDDIVSKLVDFVEYEDTPKKRI 351
 DB 568 P-----NPISLE-----KESAFKTKAEPISSTISNMELELNTNSKAPKKRL 611

QY 352 KYSVG-----SLSPVSAVL-----KTEQKEVELOHISOKC 385
 DB 612 RRKSTRHIALELVSRNLSPNCTELOIDSCSSSEIKKKYKMPVRSKRLQMEG 671
 QY 386 QEDDTYKONFLYKETOETEKLLFISEPIPHPSN--ELRGLNEKMS-NKCSMLSTAE 441
 DB 672 KKPATGAKKSN--KPMQOYSKR-----HSDTFPELKLTNAGSFTKCSMTSELK 719
 QY 442 DDIRONFTQPLKHKKQECILDISHTLSENDLELRYDHKCNIOASVHVSDFSTNSG 501
 DB 720 EFVNS--LP-----REE-----KEELETYKV-----SNA 744
 QY 502 SQPKO---KSDTVLPKADLEKDLHSIFTHDGLITINSOEHLYOAKAPFHTPPEP 558
 DB 745 EDPKDLMSGERVLOTERRSVSSSISLVPDYG-----TQESISLEVSITLGRKATP 798
 QY 559 NEC-----DFKNDSLPSCGIHRKVKIILGRNRKENL-----EPNAEFDKRTFETOEE 607
 DB 799 NKCVSQAFAFN-----PKGLHGCSD--NRNDEGFKYPLGHEVN--HSRSTSIEMEE 849
 QY 608 NRICSPVQSLDLFOTSEKSEFLGFTS 636
 DB 850 SEL---DAQYLONTFKVSKROS-FAPFSN 874

RESULT 14 US-08-425-061-23

Sequence 23, Application US/08425061

Patent No. 3622829

GENERAL INFORMATION:

APPLICANT: KING, Mary-Claire

APPLICANT: FRIEDMAN, Lori

APPLICANT: OSTERMEYER, Beth

APPLICANT: ROWELL, Sarah

APPLICANT: LYNCH, Eric

APPLICANT: SZABO, Csilla

APPLICANT: LEE, Ming

TITLE OF INVENTION: GENETIC MARKERS FOR BREAST AND OVARIAN

NUMBER OF SEQUENCES: 24

CORRESPONDENCE ADDRESSES:

ADDRESSEE: FLEHR, HOBBACH, TEST, ALBRITTON & HERBERT

STREET: 4 Embarcadero Center, Suite 3400

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-4187

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/425,061

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: OSMAN, Richard A

REGISTRATION NUMBER: 36,627

REFERENCE/DOCKET NUMBER: A-59563-3/DJB/RAO

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 494-8700

TELEFAX: (415) 494-8771

TELEX: 910 277299

INFORMATION FOR SEQ ID NO: 23:

SEQUENCE CHARACTERISTICS:

LENGTH: 1363 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-425-061-23

Query Match 4.0%, Score 140.5; DB 1; Length 1363;

Best Local Similarity 20.2%; Pred. No. 0.0043;

Matches 139; Conservative 106; Mismatches 239; Indels 205; Gaps 36;

QY 16 GGIVAKNEKNRPSLK---SLTDNPEKSKCPKMGKVEY-----LDLPVITSEK 63
 DB 323 GSKETCDNRRTPTTEKRYDLNADLPCEKKE---WNKQKLPSENPRDTEVPVITNSS 378
 QY 64 LQDKIDLGGRVEEPLSDISYLISNKKKFAQOTLGRISPPVSPESAVTAETSPPH 123
 DB 379 IQK-VNEMFSRSDDELSDSDSHDESESNKAVADVIDVINEY-----DEY 422
 QY 124 DGSSFKSPDVCLSRGKLIVERKAIKDHDTIPSNISLNSGVRKILHIDIRYIBOK- 182
 DB 423 SGSESEKI-DLLADDPHEALICKSERVH---SKSVESN-----IDKI 460
 QY 183 KKEIYLLKSSSTSVNRDGRVSGA-----OKTRGRILKPFVVEDMSQLYRPFY 233
 DB 461 FGKTYRKKAASLPRLSHVTENLIGAFVTEPQIIQERPLNKLKR---KRRTSGLHPEDE 517
 QY 234 LQILNMPFTIYSIOKPCSPEDVDPKSMOKOTQVRLIOTDG--PKYGTSTIQLEK 291
 DB 518 IKRADL-----AVQK--TPEMINOTNOTBONGVANNITNSCHEKTKGDSIQ---NEKN 567
 QY 292 KKGTCGCLQKVEDLETHLSRQHRNFAOSNOYVDDIYSLVDFVEYKEDPKKRI 351
 DB 568 P-----NPITSL-----KESAFKTAEPISSTISNKELEMINHNSKAPKKNRL 611
 QY 352 KYSVG-----SLSPVSAVL-----KTEQKEVELOHISOKC 385
 DB 612 RRKSTRHIALELVSRNLSPNCTELOIDSCSSSEIKKKYKMPVRSKRLQMEG 671
 QY 386 QEDDTYKONFLYKETOETEKLLFISEPIPHPSN--ELRGLNEKMS-NKCSMLSTAE 441
 DB 672 KKPATGAKKSN--KPMQOYSKR-----HSDTFPELKLTNAGSFTKCSMTSELK 719
 QY 442 DDIRONFTQPLKHKKQECILDISHTLSENDLELRYDHKCNIOASVHVSDFSTNSG 501
 DB 720 EFVNS--LP-----REE-----KEELETYKV-----SNA 744
 QY 502 SQPKO---KSDTVLPKADLEKDLHSIFTHDGLITINSOEHLYOAKAPFHTPPEP 558
 DB 745 EDPKDLMSGERVLOTERRSVSSSISLVPDYG-----TQESISLEVSITLGRKATP 798
 QY 559 NEC-----DFKNDSLPSCGIHRKVKIILGRNRKENL-----EPNAEFDKRTFETOEE 607
 DB 799 NKCVSQAFAFN-----PKGLHGCSD--NRNDEGFKYPLGHEVN--HSRSTSIEMEE 849
 QY 608 NRICSPVQSLDLFOTSEKSEFLGFTS 636
 DB 850 SEL---DAQYLONTFKVSKROS-FAPFSN 874

RESULT 15
 US-08-825-886-23
 Sequence 23, Application US/08825886
 Patent No. 5821328
 GENERAL INFORMATION:
 APPLICANT: KING, Mary-Claire
 APPLICANT: FRIEDMAN, Lori
 APPLICANT: OSTERMEYER, Beth
 APPLICANT: ROWELL, Sarah
 APPLICANT: LYNCH, Eric
 APPLICANT: SZABO, Csilla
 APPLICANT: LEE, Ming
 TITLE OF INVENTION: GENETIC MARKERS FOR BREAST AND OVARIAN
 NUMBER OF SEQUENCES: 24
 CORRESPONDENCE ADDRESSES:
 ADDRESSEE: FLEHR, HOBBACH, TEST, ALBRITTON & HERBERT
 STREET: 4 Embarcadero Center, Suite 3400

CITY: San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94111-4187
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/825,886
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/425,061
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: OSMAN, Richard A
 REGISTRATION NUMBER: 36,627
 REFERENCE/DOCKET NUMBER: A-59563-3/DJB/RAO
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 494-8771
 TELEFAX: (415) 494-8700
 TELEX: 910 277299
 INFORMATION FOR SEQ ID NO: 23:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1363 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-825-886-23

Query Match 4.0%; Score 140.5; DB 2; Length 1363;
 Best Local Similarity 20.2%; Pred. No. 0.0043;
 Matches 139; Conservative 106; Mismatches 239; Indels 205; Gaps 36;

QY 16 GGIOVNEKNPSLK---SLKTDNRPEKSKCKPIWGKYFY-----LDLPSTYISEK 63
 DB 323 GSKETCNDRRPTSTKPKVDLADPLCERKE---WNKQKLPCESENRPTEDVPWITLNS 378
 QY 64 LQKIDKLGCGVEEFLSDISYILSNKKKAKFAOTLGRISVPSPESAYTAETSPHPSH 123
 DB 379 IQK-VNMFSSRSDLSGSDSDSESNKAVADVLNVEY-----DEY 422
 QY 124 DGSFSPDYVCLSRGKLLVKAIKDHDIFPSNLSNALSMGVKILHIDDIRYIEOK- 182
 DB 423 SSSSEKI-DILASDPHEALICKSERVH---SKVYESN-----IEDKI 460
 QY 183 KRELVLKKSSTSVGDKRVGSGA-----OKTRTGRLLKRFVKVEDMSOLYRPY 233
 DB 461 FGKTYRKKASLPNLSHVTENLIGAFVTEPQIIOERPLTNKLR---KRPTSGLHPEDF 517
 QY 234 LQLTNMPFINISIQPCSPFVDKPSMOKOTQYKRIQTDG--DKYGTSTOLOLKEKK 291
 DB 518 IKKADL---AVOK--TPEMINQGTNOTEQNGVMNTNSGHEKNTKGDSDIQ--NEKN 567
 QY 292 KKGyceCICAKYEDLETHLSEQHRNFQSNQYGVDDIVSKLVDFEYEROPKPKRI 351
 DB 568 P-----NPIESLE-----KESAFKTRKAEPISISSISNMELELNHNSKAPKKNRL 611
 QY 352 KYSVG-----SLSPVSASVY-----KTEPOKEKVELQHSQDC 385
 DB 612 RRKSTRHIALELVVSRNLSPNCTELQIDSSSEIKKKKYNQMPVRRSRNLQLMEG 671
 QY 386 QEDDTVAEQNELYKKEQETPKKLLFTSEPIPHPSN---ELRGLNEKMS-KKCSMLSTAE 441
 DB 672 KEPAIGAKKSN--KPNQYISKR-----HSDTPELKLNTNAPGSFKCSNWTSELK 719
 QY 442 DDIRONETQLPLHKNKOCIDISEHTLSENDLELRVDHYKCNIGASVHVSDFSTDSNG 501
 DB 720 EFVNS---LP-----REK-----KEKLEIVKY-----SNNA 744

QY 502 SOKO---KSDTVLEPAKDLKENDLSIFTHDSGLITINSOEHLYOAKAPFHTPREP 558
 DB 745 EDPKDLMSGERVLIQTERSVESSISLYPGTDY-----TOESISLLEVSTLGAKTEP 798
 QY 559 NEC-----DFKNMDSLPSGKITHRYKVIILGRNKKENTL-----EPNAEFDKRTEPIQOE 607
 DB 799 NKCVSQCAAFEN---PKGLIHCCSKD--NRNDTEGFYPLGHEVN---HSKETSIBME 849
 QY 608 NRICSSPVQSILDLFQISEEKSEELGFTS 636
 DB 850 SEL---DAQYLQNTFFKVSRRS-FAPFSN 874

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